

Title (en)

PROCESS FOR DECARBONATING CARBONATED MATERIALS AND DEVICE THEREFOR

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ENTKARBONISIERUNG VON KOHLENSTOFFHALTIGEN MATERIALIEN

Title (fr)

PROCÉDÉ DE DÉCARBONATION DE MATÉRIAUX CARBONATÉS ET DISPOSITIF ASSOCIÉ

Publication

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Application

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Abstract (en)

[origin: WO2022049137A1] The present invention relates to a process for the decarbonation of limestone, dolomite or other carbonated materials, comprising the following steps: - heating particles of carbonated materials (6) in a reactor (8) of a first circuit (2) to obtain decarbonated particles (16); - conveying particles of carbonated materials (6) by a first entraining gas (4) in the first circuit (2) for preheating, said gas (4) comprising said carbon dioxide, said gas composition being substantially free of nitrogen; - separating the carbonated particles (6) from a first entraining gas (4) flow; - transferring the decarbonated particles (16) to a cooling section (22) of a second circuit (12) comprising a second entraining gas (14) in which the conveyed decarbonated particles (16) release a portion of their thermal energy; - separating the decarbonated particles (16) from a second entraining gas (14) flow; wherein said second entraining gas (14) is substantially free of carbon dioxide, and the device thereof.

IPC 8 full level

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